



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/373,544 08/13/99 NAKATSU

H 829-522

MM91/0801

NIXON & VANDERHYE
1100 NORTH GLEBE ROAD 8TH FLOOR
ARLINGTON VA 22201

EXAMINER

MINTEL, W

ART UNIT

PAPER NUMBER

2811

DATE MAILED: 08/01/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

#7

Office Action Summary

Application No.

09/373544

Applicant(s)

Nakatsu et al.

Examiner

William Mintel

Group Art Unit

2811

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-10 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-10 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☒ All ☐ Some* ☐ None of the:

☒ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____

☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 5+6
- ☐ Notice of Reference(s) Cited, PTO-892
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

Art Unit: 2811

1. The disclosure is objected to because of the following informalities: The specification contains grammatic or other errors. Examples are below. To be fully responsive to this action, Applicant must make a bona fide attempt to correct any other errors. Page 35, line 20, omits "to" after "as". Page 38, line 21, "hardly", is ungrammatical.

Appropriate correction is required.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

3. (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Fletcher)233).

5. In re claim 1, lines 1-2, column 3, line 17, recites a GaAs substrate. In re claim 1, lines 3-9, the is N type lower confining layer 21 of AlGaInP, active layer 22 of N-type AlGaInP, and upper P-type confining layer 23 of AlGaInP. In re claim 1, lines 10-18, column 3, lines 49-50, recite a current spreading or current diffusion layer 24. See also column 5, lines 45-55.

6. In re claim 3, column 3, line 43, discloses that window layer 24 is transparent. In re claim 4, see column 4, lines 25-40. In re claims 5-10, column 5, line 55, to column 6, line 7, disclose grading.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

Art Unit: 2811

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.


8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher (233) in view of Sugawara (889).
9. Fletcher is described above but lacks explicit mention of an inclined substrate. Column 9, lines 45-52, of Sugawara teach that the smallest half value width of photo luminescence is obtained with a 10 to 20 degree inclination of the substrate in a direction of (011).
10. Cited as relevant to the claims are Sakaguchi (829), Lerner (047), Leng (009), Fletcher (718), Hiroyuki (218) Noto (553), Hiroyuki (510), Hosoba (446), and Kuo (919).
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to W. Mintel whose telephone number is (703) 308-4916. The examiner can normally be reached on M-Th from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas, can be reached on (703) 308-2772. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Mintel/nt

7/25/01



William Mintel
Primary Examiner
Art Unit 2811